

Docket No. 2312-0866-2PCT  
IN RE APPLICATION OF: Hayashi OTSUKI, et al.  
SERIAL NO: 09/530,588  
CPA FILED: November 4, 2002  
FOR: METHOD OF FORMING SEMICONDUCTOR WIRING STRUCTURES



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ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:  
Transmitted herewith is an amendment in the above-identified application.

- ☐ No additional fee is required  
☐ Small entity status of this application under 37 C.F.R. §1.9 and §1.27 is claimed.  
☐ Additional documents filed herewith:

The Fee has been calculated as shown below:

CLAIMS	CLAIMS REMAINING		HIGHEST NUMBER PREVIOUSLY PAID	NO. EXTRA CLAIMS	RATE	CALCULATIONS
TOTAL	17	MINUS	46	0	x \$18 =	\$0.00
INDEPENDENT	3	MINUS	6	0	x \$84 =	\$0.00
		<input type="checkbox"/> MULTIPLE DEPENDENT CLAIMS			+ \$280 =	\$0.00
		TOTAL OF ABOVE CALCULATIONS				\$0.00
		<input type="checkbox"/> Reduction by 50% for filing by Small Entity				\$0.00
		<input type="checkbox"/> Recordation of Assignment			+ \$40 =	\$0.00
		TOTAL				\$0.00

☐ A check in the amount of **\$0.00** is attached.

☒ Please charge any additional Fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.

☒ If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time may be charged to Deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.

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Docket No. 2312-0866-2PCT



#25/Amend E  
5.12.03  
C. Moore

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF: :  
HAYASHI OTSUKI ET AL. : GROUP: 2814  
SERIAL NO: 09/530,588 : EXAMINER: QUACH, T.  
CPA FILED: November 4, 2002 :  
FOR: METHOD OF FORMING SEMICONDUCTOR WIRING STRUCTURES

AMENDMENT UNDER 37 CFR 1.111

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:

In response to the Office Action mailed January 29, 2003, please amend the above-identified patent application as follows:

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IN THE CLAIMS

Please cancel Claims 89-111 without prejudice or disclaimer.

Please add new Claims 112-128 as follows:

E<sup>1</sup>  
112. (New) A method of forming a barrier metal film formed of a nitride film including tungsten by thermal CVD, comprising:  
positioning a substrate in a processing vessel;  
maintaining a predetermined pressure in the processing vessel;  
forming a film containing tungsten on the substrate by supplying WF<sub>6</sub> gas and SiH<sub>4</sub> gas into the processing vessel;  
shutting off the supplying of the WF<sub>6</sub> gas and SiH<sub>4</sub> gas into the processing vessel;

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